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| 09/534,262      | 03/24/2000  | Kanji Hata           | 2000-0351           | 2898             |

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EXAMINER

CHANG, RICK KILTAE

| ART UNIT | PAPER NUMBER |
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|----------|--------------|

3729

DATE MAILED: 08/01/2003

25

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/534,262

Applicant(s)

HATA ET AL.

Examiner

Rick K. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 22,24.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15-17 and 19-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. the disclosure, as originally filed, fails to provide support for “each of . . . supply table” (claim 15, lines 5-10 in the marked-up version) and “each of the first . . . the board” in last two lines in claim 15. “replaceable by being . . . supply tables” (claim 15, lines 7-10 in the marked-up version) will not be given any patentable weight. Applicants’ disclosure only supports replacing a part of tables 28A thru 28D, which means replacing the cassettes. There is no support for tables actually being removed and replaced by rolling the tables using casters.

**NOTE: Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-17 and 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Last two lines in claim 15: for example, is the first section movable to the second supply table in the second section, third section or fourth section? Does the second section move out of the way for the first section to encroach into the second section space to pick-up components from the second supply table? It is unclear whether each head of each section or each section is performing this operation.

**NOTE: Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15-17 and 19-20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US 5,323,528) in view of Kitamura et al (US 5,740,604).

Baker discloses a pair of component supply tables (27) with reels (cassettes are attached at the end of reel), first and second mounting head sections (65, 67), mounting heads are independently movable to pick-up components from their respective tables, and the take-out positions are extending straight line along axis 53.

Bake fails to disclose providing each of the tables with casters and replacing the tables with desired components therein.

Kitamura discloses providing a table with casters (Fig. 3) and replacing the tables with desired components therein (col. 8, lines 57-67, entire 9 and col. 10, lines 1-27) thereby allowing the component table to reload with different types of components at a component reloading station and speeding up the mounting process.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing a table with casters and replacing the tables with desired components therein to the Baker's mounting device, as taught by Kitamura, for the purpose of allowing the component table to reload with different types of components at a component reloading station and speeding up the mounting process.

7. Claims 18 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US 5,323,528) in view of Kitamura et al (US 5,740,604), and further in view of Nakao et al (US 5,743,005).

Baker discloses a pair of component supply tables (27) with reels (cassettes are attached at the end of reel), a pair of U-shaped support frames (29 on both ends of 11) and base structure (29), first and second mounting head sections (65, 67), mounting heads are independently

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movable to pick-up components from their respective tables, and the take-out positions are extending straight line along axis 53.

Bake fails to disclose providing each of the tables with casters, replacing the tables with desired components therein, and extending the board transfer path through openings in the U-shaped support frames.

Kitamura discloses providing a table with casters (Fig. 3) and replacing the tables with desired components therein (col. 8, lines 57-67, entire 9 and col. 10, lines 1-27) thereby allowing the component table to reload with different types of components at a component reloading station and speeding up the mounting process.

Nakao discloses extending the board transfer path through openings in the U-shaped support frames (Fig. 6) thereby allowing the mounting heads to travel shorter distances to mount components for decreasing production time.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing a table with casters and replacing the tables with desired components therein to the Baker's mounting device, as taught by Kitamura, for the purpose of allowing the component table to reload with different types of components at a component reloading station and speeding up the mounting process.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by extending the board transfer path through openings in the U-shaped support frames to the Baker's mounting device, as taught by Nakao, for the purpose of allowing the mounting heads to travel shorter distances to mount components for decreasing production time.

**NOTE: Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

***Response to Arguments***

8. Applicant's arguments filed 5/14/03 have been fully considered but they are not persuasive.

As far as drawings are concerned, Examiner has done his best to alert the applicants of deficiencies.

112, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs, rejections are maintained as noted above.

Baker's heads are moved along 63 axis, as well as up and down and rotated. Therefore, first and second directions are perpendicular along 63 axis and up and down.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., resulting in . . . unlike Baker; Further, in Baker . . . Baker system; taken out from a . . . production) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**NOTE: Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and**

**proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

***Interviews After Final***

**9. Applicant note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing) to clarify issues for appeal requiring only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations will be denied. See MPEP 714.13 and 713.09.**

***Conclusion***

**10. Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

**11. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after




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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is (703) 308-4784. The examiner can normally be reached on 5:30 AM to 1:30 PM, Monday through Friday, except for maxi-flex day off (any one of working days).

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

A handwritten signature in black ink, appearing to be 'Richard Chang', written over a horizontal line.

**RICHARD CHANG  
PRIMARY EXAMINER**

RC  
July 30, 2003